

Silicosis

What is silicosis?

Silicosis is caused by exposure to respirable crystalline silica dust. Crystalline silica is a basic component of soil, sand, granite, and most other types of rock, and is used as an abrasive blasting agent. Silicosis is a progressive, disabling, and often fatal lung disease. Cigarette smoking adds to the lung damage caused by silica

Effects of silicosis

- Lung cancer - silica has been classified as a human lung carcinogen
- Bronchitis/Chronic Obstructive Pulmonary Disorder (COPD)
- Tuberculosis (TB) - Silicosis makes an individual more susceptible to TB
- Scleroderma - a disease affecting skin, blood vessels, joints and skeletal muscles
- Possible renal disease

Symptoms of silicosis

- Shortness of breath
- Dry, nonproductive cough
- Possible fever
- Fatigue
- Loss of appetite
- Chest pain
- Respiratory failure, which may eventually lead to death

Sources of exposure

- Sandblasting for surface preparation
- Crushing and drilling rock and concrete
- Masonry and concrete work (e.g., building and road construction and repair)
- Mining/tunneling; demolition work
- Cement and asphalt pavement manufacturing

Preventing silicosis

- Use all available engineering controls such as blasting cabinets and local exhaust ventilation
- Avoid using compressed air for cleaning surfaces
- Use water sprays, wet methods for cutting, chipping, drilling, sawing, grinding
- Substitute non-crystalline silica blasting material
- Use respirators approved for protection against silica; if sandblasting, use abrasive blasting respirators
- Do not eat, drink or smoke near crystalline silica dust
- Wash hands and face before eating, drinking or smoking away from exposure areas

For more complete information:

OSHA

Occupational Safety & Health Administration

US Department of Labor

www.osha.gov